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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

KISS, ERIC B

ART UNIT

PAPER NUMBER

2122

DATE MAILED: 05/14/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/727,606

Applicant(s)

TABBERT, ALLEN B.

Examiner

Eric B. Kiss

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 December 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. The reply filed March 24, 2004, has been received and entered. Claims 1-15 are pending.

#### *Response to Amendment*

2. Applicant's amendment to the Abstract, adding the phrase "are disclosed" does not comply with the format specified in MPEP §608.01(b).

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

**The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc. [emphasis added].**

#### *Response to Arguments*

3. Applicant's arguments filed March 24, 2004, have been fully considered but they are not persuasive.

- a. In response to Applicant's arguments on p. 6, last paragraph, continuing onto p. 7, the cited section beginning in the last paragraph of p. 252, and continuing through the top of p. 257

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discloses how Turbo Assembler code (assembly language code) can access C++ language functions and variables (high-level definitions of data structures). Note that within the assembly language code disclosed, for example, on p. 253, the C code data structure *Flag:WORD* is part of an EXTRN directive statement. This directive statement (a reference to elements of the high-level language data structure) is replaced by the assembler/linker when processed.

b. In response to Applicant's arguments on p. 7, in paragraph 3, see the discussion above. Additionally, see, for example, p. 2 of the *TASM3* reference. Supporting structure (computer hardware) necessary to perform the functions is disclosed therein.

4. In view of Applicant's unpersuasive arguments, the previous rejections are maintained and reproduced below.

### ***Specification***

5. The abstract of the disclosure is objected to for reasons discussed above under item number 2.

### ***Claim Rejections - 35 USC § 102***

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. Claims 1-15 are rejected under 35 U.S.C. 102(b) as being anticipated by “Turbo Assembler® Version 3.0 User’s Guide,” 1991 (hereinafter *TASM3*).

As per claim 1, *TASM3* discloses determining storage requirements from high-level language definitions of one or more data structures in an assembly language source program and removing the definitions from the assembly source program; determining memory addresses of the one or more data structures from memory allocation directives in the assembly language source program and removing the allocation directives from the assembly source program; and replacing references to elements of the data structures in the assembly source program with memory addresses (see, for example, page 252, last paragraph, through page 257, paragraph 3; and “Declaring public symbols”, “Defining external symbols”, “Defining global symbols”, and “Defining communal variables” on pages 224-227; Note that PUBLIC, EXTRN, GLOBAL, and COMM are assembler/linker directives that get replaced by the assembler/linker when processed).

As per claim 2, *TASM3* further discloses assembling the assembly source program into a first object code segment (see, for example, the last paragraph on page 242 through the end of page 243); compiling the high-level language program into a second object code segment (see, for example, the last paragraph on page 242 through the end of page 243); and linking the first and second object code segments (see, for example, the last paragraph on page 242 through the end of page 243).

As per claim 3, *TASM3* further discloses each allocation directive including a reference to a data structure definition, a variable name, and an address (for example, an EXTRN directive can be used to reference an external C++ variable, which inherently has a data structure definition, a variable name, and an address, assuming the C++ variable has been properly defined as “public” and is therefore accessible; see, for example, page 252, last paragraph, through page 257, paragraph 3).

As per claim 4, *TASM3* further discloses variable name including an array size (see, for example, “Defining communal variables” on pages 226-227).

As per claim 5, *TASM3* further discloses a reference to an element of a data structure in the assembly source program including a hierarchical specification of the element (see, for example, see, for example, Table 5.12 on pages 91-92).

As per claim 6, *TASM3* further discloses a reference to an element of a data structure in the assembly source program including one of a request for an address and a request for an offset address of the element (see, for example, Table 5.12 on pages 91-92).

As per claim 7, *TASM3* further discloses a reference to an element of a data structure in the assembly source program including one of a request for an address of the element, a request for

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an offset address of the element, and a request for a size of the element (see, for example, Table 5.12 on pages 91-92).

As per claim 8, *TASM3* further discloses replacing a reference to an element of a data structure that includes a request for a size of an element with the size of the element (see, for example, Table 5.12 on pages 91-92).

As per claim 9, see the disclosure applied above to claim 2.

As per claim 10, see the disclosure applied above to claim 3.

As per claim 11, see the disclosure applied above to claim 4.

As per claim 12, see the disclosure applied above to claim 2.

As per claim 13, see the disclosure applied above to claim 3.

As per claim 14, see the disclosure applied above to claim 1.

As per claim 15, see the disclosure applied above to claim 4.

### ***Conclusion***

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after

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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Eric B. Kiss whose telephone number is (703) 305-7737. The Examiner can normally be reached on Tue. - Fri., 7:30 am - 5:00 pm. The Examiner can also be reached on alternate Mondays.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Tuan Dam, can be reached on (703) 305-4552. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EBK / EBK  
May 6, 2004

  
WEI Y. ZHEN  
PRIMARY PATENT EXAMINER